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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/770,250

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EXAMINER

MILIA, MARK R

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

04/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/770,250	Applicant(s) MORONEY ET AL.	
	Examiner Mark R. Milia	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,8-13 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-13 and 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 1/5/10 and has been entered and made of record. Currently, claims 1-5, 8-13, and 15-19 are pending.

Response to Arguments

2. Applicant's arguments filed 1/5/10 have been fully considered but they are not persuasive.

The applicant asserts that neither Chen (US 5,684,934) nor Ogura (US 6,236,450) teach or suggest if the current page includes the error, then discarding the current page, printing the new logical page from the modified print job to generate a new page, and sending the new page to the output tray in place of the current page including the error, as recited in claim 1 and identifying a logical page in the received print job corresponding with the current page being processed, identifying a logical page in the modified print job corresponding with the identified logical page in the received print job, determining if there is a difference between the identified logical pages, and indicating that the current page includes the error in response to determining that there is a difference, as recited in claim 2. The Examiner respectfully disagrees as the combination of Chen and Ogura does disclose such features. Particularly, Chen

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discloses detecting an error with logical pages of a print job or with the physical print job, such as a paper jam. After the error is detected, logical pages being affected by the error will be cleared (column 4 lines 5-32) and an error recovery process will be performed. During the error recovery process pointers are utilized to determine where the error occurred and where to start generating the new logical pages to be printed (column 5 lines 23-55). Chen further discusses the error recovery process, specifically the reposition process, the repositioning process ensures upon completion printing will resume with the correct page to sheet positioning (column 9 lines 60-63). Ogura discloses during a copy procedure if the document being copied jams then all the pages of the document, those that were already copied and those that have not yet been copied, are placed back into the input tray/ADF and processing starts again with those pages that had already been copied going straight to the output bin and when the page or pages that jammed are determined then copying proceeds to ensure that the entire document has been copied properly without redundancies and without missing any pages. Ogura further states that special copy modes, such as "page replacing", can store image information on all documents D in a memory, which would be analogous to logical pages of a document, and that executing of the document can be based on the image data stored in memory (column 12 lines 49-60). Although Ogura does not specifically state the use of logical pages of a print job, Ogura does imply such and Chen discloses use of logical pages of a document for printing an error recovery. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize the method of gathering the entire document and reloading the document into

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an input tray, after an error is detected, and processing the document to send pages that were correctly processed prior to the error to an output bin and to process pages that were not yet printed and send the pages to the output bin to properly print or copy a document, as described by Ogura, to replace just printing the pages that are determined not to be printed after an error is detected, as described by Chen. Replacing the entire document ensures that the document will not contain the page in which the error was detected and thereby eliminate the wasting of time and resources. It is well known in the art to reprint pages that contain errors and replace the newly printed pages with those that contained errors without the need to reprint the entire document, as is shown in the references cited by the examiner. Therefore, it would have been obvious to one of ordinary skill in the art to adapt the teachings of Ogura into a printing system as set forth by Chen to arrive at a system that prints a print job, determines if an error exists on a printed page and then puts the entire job back into an input tray and reprints the pages that contain errors and replaces those sheets in the document.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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4. Claims 1-5, 8-13, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,684,934 to Chen et al., as cited in the IDS dated 2/2/04 in view of U.S. Patent No. 6,236,450 to Ogura.

Regarding claims 1 and 15, Chen discloses a method of reprinting at least one page of a printed document, the method comprising: receiving a print job at a printer to generate the printed document, wherein each page of the printed document corresponding with a logical page in the print job (see Figs. 1 and 3 and column 2 line 58-column 3 line 14), determining that a page of the printed document includes an error (see column 3 lines 15-32 and 62-66, column 4 lines 5-32 and column 5 lines 23-39, error detection units **6A**, **6B**, **6C**, and **6D** detect page errors), modifying the print job to include a new logical page (see column 5 lines 30-55, when an error is detected with a particular page, printing is momentarily halted and new page data is reinitialized and set to the print engine for printing).

Chen does not disclose expressly instructing a user to load the printed document into an inserter tray on the printer, processing each page of the printed document from the inserter tray on the printer to an output tray on the printer by: determining if a current page being processed includes the error, and if the current page includes the error, then discarding the current page, printing the new logical page from the modified print job to generate a new page, and sending the new page to the output tray in place of the current page including the error.

Ogura discloses determining that at least one page of a document includes an error (see column 8 line 55-column 9 line 3, system detects when the document gets

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jammed), instructing a user to load the document into an inserter tray on the printer (see column 8 line 61-column 9 line 10 and column 13 lines 9-15, an error message is displayed to the user instructing the user to remove all document and set them again in the input tray), processing each page of the document from the inserter tray on the printer to an output tray on the printer by: determining if a current page being processed includes the error (see column 9 line 23-column 10 line 28), and if the current page includes the error, then discarding the current page, printing the new logical page from the modified print job to generate a new page, and sending the new page to the output tray in place of the current page including the error (see column 9 line 23-column 10 line 28 and column 12 lines 49-60, references shows that during a copy procedure if the document being copied jams then all the pages of the document, those that were already copied and those that have not yet been copied, are placed back into the input tray/ADF and processing starts again with those pages that had already been copied going straight to the output bin and when the page or pages that jammed are determined then copying proceeds to ensure that the entire document has been copied properly without redundancies and without missing any pages).

Regarding claim 8, Chen discloses a system operable to reprint a page of a printed document, the system comprising: a printer operable to receive a print job, and to generate the printed document based on the print job, wherein each page of the printed document correspond with a logical page in the print job (see Figs. 1 and 3 and column 2 line 58-column 3 line 14), wherein the printer is further operable to determine that a page of the printed document includes an error and to modify the print job to

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include a new logical page (see column 3 lines 15-32 and 62-66, column 4 lines 5-32 and column 5 lines 23-55, error detection units **6A**, **6B**, **6C**, and **6D** detect page errors and when an error is detected with a particular page, printing is momentarily halted and new page data is reinitialized and set to the print engine for printing).

Chen does not disclose expressly a user interface operable to instruct a user to load the printed document into an inserter tray on the printer, the printer further operable to process each page of the printed document from the inserter tray on the printer to an output tray on the printer, and to determine if a current page being processed includes the error, wherein the printer, responsive to determining that the current page includes the error, is further operable to discard the current page, print the new logical page from the modified print job to generate a new page, and to send the new page to the output tray in place of the current page including the error.

Ogura discloses software configured to determine that at least one page of a document includes an error (see column 8 line 55-column 9 line 3, system detects when the document gets jammed), a user interface operable to instruct a user to load the printed document into an inserter tray on the printer (see column 8 line 61-column 9 line 10 and column 13 lines 9-15, an error message is displayed to the user instructing the user to remove all document and set them again in the input tray), the printer further operable to process each page of the printed document from the inserter tray on the printer to an output tray on the printer, and to determine if a current page being processed includes the error, wherein the printer (see column 9 line 23-column 10 line 28), responsive to determining that the current page includes the error, is further

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operable to discard the current page, print the new logical page from the modified print job to generate a new page, and to send the new page to the output tray in place of the current page including the error (see column 9 line 23-column 10 line 28 and column 12 lines 49-60, references shows that during a copy procedure if the document being copied jams then all the pages of the document, those that were already copied and those that have not yet been copied, are placed back into the input tray/ADF and processing starts again with those pages that had already been copied going straight to the output bin and when the page or pages that jammed are determined then copying proceeds to ensure that the entire document has been copied properly without redundancies and without missing any pages).

KSR analysis – Combining Prior Art Elements According to Known

Methods to Yield Predictable Results

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize the method of gathering the entire document and reloading the document into an input tray, after an error is detected, and processing the document to send pages that were correctly processed prior to the error to an output bin and to process pages that were not yet printed and send the pages to the output bin to properly print or copy a document, as described by Ogura, to replace just printing the pages that are determined not to be printed after an error is detected, as described by Chen. Replacing the entire document ensures that the document will not contain the page in which the error was detected and thereby eliminate the wasting of time and resources. It is well known in the art to reprint pages that contain errors and replace the

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newly printed pages with those that contained errors without the need to reprint the entire document, as is shown in the references cited by the examiner. Therefore, it would have been obvious to one of ordinary skill in the art to adapt the teachings of Ogura into a printing system as set forth by Chen to arrive at a system that prints a print job, determines if an error exists on a printed page and then puts the entire job back into an input tray and reprints the pages that contain errors and replaces those sheets in the document, thereby arriving at the invention set forth in claims 1, 8, and 15.

Therefore, it would have been obvious to combine Ogura with Chen to obtain the invention as specified in claims 1, 8, and 15.

Regarding claims 2, 9, and 16, Chen further discloses identifying a logical page in the received print job corresponding with the current page being processed, identifying a logical page in the modified print job corresponding with the identified logical page in the received print job, determining if there is a difference between the identified logical pages; and indicating that the current page includes the error in response to determining that there is a difference (see column 3 line 42-column 4 line 32, column 5 lines 23-55, column 9 lines 3-63, column 10 lines 5-11, and column 11 lines 13-18, Chen discloses detecting an error with logical pages of a print job or with the physical print job, such as a paper jam, after the error is detected, logical pages being affected by the error will be cleared and an error recovery process will be performed. During the error recovery process pointers are utilized to determine where the error occurred and where to start generating the new logical pages to be printed.

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Chen further discusses the error recovery process, specifically the reposition process, the repositioning process ensures upon completion printing will resume with the correct page to sheet positioning). Ogura further discloses wherein determining if the current page being processed includes the error further comprises: identifying a page in the received print job corresponding with the current page being processed, identifying a page in the modified print job corresponding with the identified page in the received print job, determining if there is a difference between the identified pages, and indicating that the current page includes the error in response to determining that there is a difference (see column 9 line 23-column 10 line 28 and column 12 lines 49-60, references shows that during a copy procedure if the document being copied jams then all the pages of the document, those that were already copied and those that have not yet been copied, are placed back into the input tray/ADF and processing starts again with those pages that had already been copied going straight to the output bin and a comparison being made to determine page that jammed and needs to be reprinted to ensure that the entire document has been copied properly without redundancies and without missing any pages).

Regarding claims 3, 10, and 17, Chen further discloses querying the user for the modified print job in response to determining that a page of the printed document includes an error (see column 4 lines 33-52, when an error is detected the user can request a backspace request to reprint a page from a desired point).

Regarding claims 4, 11, and 18, Ogura further discloses determining that the error is a paper jam and notifying the user of the paper jam (see column 8 line 55-column 9 line 3).

Regarding claims 5, 13, and 19, Ogura further discloses wherein the error includes an update to the print job after printing the print job (see column 9 lines 4-33, a message is displayed instructing the user to remove all documents and place them back into the input tray and then this is detected by the printer and processing starts again with those pages that had already been copied going straight to the output bin and when the page or pages that jammed are determined then copying proceeds to ensure that the entire document has been copied properly without redundancies and without missing any pages).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571)272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached at (571) 272-7437. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark R. Milia
Examiner
Art Unit 2625

/Mark R. Milia/
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/David K Moore/
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